

ABSTRACT OF THE DISCLOSURE

The invention provides a method and system for scheduling tasks in an MP system, and provides parallel execution of those tasks while implicitly synchronizing access to resources used by that system. Tasks in the system are each assigned to a scheduling domain, thus associating those tasks with a set of resources controlled by that domain. A scheduler operating at each processor implicitly synchronizes those resources controlled by each domain, by scheduling only one task for each domain to execute concurrently in the system. Because each instance of the scheduler selects which task is next run independently of its processor, each domain can migrate from one processor to another; thus, each domain can have a task executing on any processor, so long as no domain has two tasks executing concurrently in the system. Thus, domains are not bound to any particular processor. Hence the method and system are symmetric.